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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,093	01/15/2002	Susumu Takeuchi	837.1978	1243

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EXAMINER	
BELLO, AGUSTIN	
ART UNIT	**PAPER NUMBER**
2633	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/045,093	TAKEUCHI ET AL.	
	Examiner	Art Unit	
	Agustin Bello	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) *4-7,14-17 and 19* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,8-13 and 18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/15/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Species A2 and Species B1 in the reply filed on 1/14/05 is acknowledged.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Sorin (U.S. Patent No. 6,766,115).

Regarding claim 1, Sorin teaches a wavelength-count-detecting unit (reference numeral 206 in Figure 1) for detecting the number of wavelengths of wavelength components included in said input signal and determining whether the number of wavelengths is normal or abnormal; a plurality of identifier-detecting units (e.g. reference numeral 212 in Figure 2 a plurality of which detect each uniquely delayed wavelength) each associated with one of said wavelength components and used for determining whether or not an identifier set in one of said wavelength components that has said associated wavelength is normal; and a judgment unit (reference numeral 214 in Figure 2) for forming a judgment on existence of an error for each of said wavelength components on the basis of a detection result output by said wavelength- count-

detecting unit and a detection result output by said identifier-detecting unit associated with said wavelength component.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sorin.

Regarding claims 2 and 3, Sorin differs from the claimed invention in that Sorin fails to specifically teach the judgment units functionality regarding normal or abnormal operation. However, being that the system of Sorin is devised to test devices and make a determination of normal or abnormal operation, one skilled in the art would clearly have recognized that the processor of Sorin acting as the judgment unit of the claimed invention could have carried out the functionality claimed. Furthermore, being that no structural difference exists between the processor of Sorin and the judgment unit claimed, the processor of Sorin could have functioned in the manner claimed. As such, it would have been obvious to one skilled in the art at the time the invention was made to design the processor of Sorin to make the same decisions as claimed.

6. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swanson (U.S. Patent No. 6,580,531).

Regarding claim 8 Swanson teaches a unit (reference numeral 8, 10 in Figure 1) for receiving said input signals from a plurality of transmission lines and for converting said input

signals into an optical signal; a plurality of light-power-detecting units (reference numeral 30, 36 in Figure 1) for forming judgments as to whether or not light powers of said optical signals output by said receiving units are abnormal; and an OSNR-detecting unit (reference numeral 30 in Figure 1) for detecting signal-to- noise ratios of wavelength components included in the signal output and for forming a judgment as to whether or not the magnitude of a noise included in each of said wavelength components is abnormal; and a judgment unit (reference numeral 14, 24 in Figure 1) for forming a judgment on an error for each of said wavelength components on the basis of detection results received from said light-power-detecting units and a detection result received from said OSNR-detecting unit. Swanson differs from the claimed invention in that Swanson fails to specifically teach a multiplexing unit for multiplexing said optical signals output by said receiving units or the multiplexed nature of the communication signals. However, the system of Swanson is clearly applicable to a wavelength division multiplex system and Swanson suggests as much via the title of the application and references to WDM in the specification. Furthermore, Official Notice is taken that the use of wavelength multiplexing units in WDM system are well known in the art and readily available. Moreover, it would have been obvious to one skilled in the art at the time the invention was made to have provided a plurality of the transceivers taught by Swanson and multiplexed their output via the well-known multiplexing units since it has been held that mere duplication of the essential working parts of device involves only routine skill in the art. St. Regis Paper Combination of. v. Bemis Combination of., 193 USPQ 8. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to group a plurality of transceivers taught by Swanson and multiplex their outputs to form the multiplexed signals claimed.

Regarding claim 9, Swanson teaches a variable optical filter (reference numeral 32 in Figure 1) passing on only said component having multiplexed signal's wavelength a wavelength in a pass band set in said variable optical filter, wherein said OSNR-detecting unit (reference numeral 30 in Figure 1) detects a signal-to-noise ratio of said wavelength component passed on by said variable optical filter.

Regarding claims 10-12, Swanson teaches that said OSNR-detecting unit (reference numeral 30 in Figure 1) has the ability to function as claimed since no structural difference exists between the OSNR-detecting unit of Swanson and that of the claimed invention.

Regarding claim 13, Swanson teaches that the judgment unit (reference numeral 14 in Figure 1) has the ability to function as claimed since no structural difference exists between the judgment unit of Swanson and that of the claimed invention.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sorin and Swanson.

Claim 18 recites a combination of limitations regarding the transmitter and receiver covered by the prior art cited above. As such the combination of Sorin and Swanson meet the limitations of the claimed invention as noted above. One skilled in the art would have been motivated to combine the transmitter of Swanson with the receiver of Sorin in order to facilitate communication between two points. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the teachings of Sorin and Swanson and arrive at the limitations of the claimed invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Agustin Bello whose telephone number is (571) 272-3026. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AB

AGUSTIN BELLO
PATENT EXAMINER